

DETAILED ACTION

In response to reply filed 6/14/2010, claims 1-37, 45, 49, & 61 are cancelled. Claims 38-44, 46-48, 50-60, & 62-75 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/14/2010 has been entered.

Specification

2. The disclosure is objected to because of the following informalities: Explicit written description for the limitation of outputting said first instructional response via an output device of said computing device, wherein said first instruction response is an instruction from said computing device for use by a user of said computing device to carry out one or more user actions using an input component of said computing device of claims 73-75 was not found in the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 62-72 & 75 are rejected under 35 U.S.C. 101 as covering both non-statutory and statutory subject matter, because the broadest reasonable interpretation of claim 75, drawn to a computer readable medium (also called machine readable medium and other such variations), typically covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. See MPEP 2111.01. The United States Patent and Trademark Office (USPTO) is obliged to give claims their broadest reasonable interpretation consistent with the specification during proceedings before the USPTO. See *In re Zletz*, 893 F.2d 319 (Fed. Cir. 1989). When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. See *In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007). A claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding the limitation "non-transitory" to the claim. *Cf. Animals - Patentability*, 1077 Off. Gaz. Pat. Office 24 (April 21, 1987). Such an amendment would typically not raise the issue of new matter, even when the specification is silent because the broadest reasonable interpretation relies on the ordinary and customary meaning that includes signals *per se*. The limited situations in which such an amendment could raise issues of new matter occur, for example, when the specification does not support a non-transitory embodiment because a signal *per se* is the only viable embodiment such that the amended claim is impermissibly broadened beyond the supporting disclosure. See, e.g., *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473 (Fed. Cir. 1998).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 40-44, 47-49, 52-55, 57, 59, 60, 63-67, 69, & 71-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blume (US 6,915,103 B2), hereinafter referred to as Blume, further in view of Nir (US 2002/0029146 A1), hereinafter known as Nir.

8. Blume teaches a computing device and computer readable media for implementing a method for providing instructional response, comprising: an input device operable to read a first and a second plurality of substantially invisible codes disposed on a surface (user identifies the book and page number, then taps the stylus, 3:32-44), wherein a the print elements are disposed substantially invisible codes (3:57-4:9), and wherein said first and said second plurality of substantially invisible codes provide location information of said first and said second print elements respectively (substantially invisible machine-readable coordinate grid, 3:57-4:9), wherein said receiving is responsive to a user selection of said first print element via an input device (3:44-56); a processor for processing substantially invisible codes (4:46-5:5), wherein said processing comprises: determining a first position associated with said first print element

responsive to a user selection thereof (3:18-30); and in response to said determining said first position, mapping said first position to a location in memory that a first instructional response associated with said first location is stored (index to database of information, 3:32-44), wherein said first instructional response is an instruction from said computing device for use by a user of said computing device (The system can be used for interactive applications, such as tests, automatically updated newspapers, and speed-reading training. For example, a multiple choice test may be printed on the special paper, such that a student simply selects their chosen answers by tapping on the selected answer. Audio feedback {such as through audio headphones} could be provided for purposes such as to give the definition of a word in a test question, or to confirm which answer the student has actually selected, 7:45-54; also, such as, "turn the page when you hear the BEEP, 1:29-35); and an output device for outputting said first instructional response (audio speaker, 4:46-5:5), wherein said input device, said processor and said output device reside in a same housing (4:46-5:5) [Claims 57, 69, & 73-75].

9. What Blume fails to teach is outputting said first instructional response via an output device of said computing device, wherein said first instruction response is an instruction from said computing device for use by a user of said computing device to carry out one or more user actions using an input component of said computing device [Claims 73-75]. However, Nir teaches a language acquisition aide in the form of a computerized stylus (Figures 2A & 2B), designed to teach a user to hear and distinguish the sounds of the language system of text and pronounce them correctly; a portion of text is scanned by the user and the computerized system provides an audio or displayed output of a text-to-speech synthesis of a sentence, clause, or phrase; the computerized system compares the recorded speech of the user with the text-to-speech synthesis, and repeats its audio output of mispronounced words, and directs the user to try again by rescanning the text and repeating the mispronounced words correctly (all at 0103-

113). Nir further teaches using a writing tip in the hand-held pen device to allow marking up text and adding written comments, and may read the writing of its own writing tip (Para. 0124). It would have been a simple matter to merely have had the stylus of Blume provide an audio output to a user instructing them to "try again" when a mispronounced word, previously scanned or written by the user, is detected by the stylus. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the scanning and writing stylus of Blume to output an instruction for use by a user to carry out one or more user actions using an input component of the stylus, as suggested by Nir, in order to distinguish the sounds of a language system of a scanned or written text and pronounce them correctly [Claims 73-75].

10. Blume teaches a stylus having an optical detector for detecting said first and said second plurality of substantially invisible codes printed on said surface (detector, 3:18-30), a memory unit comprising code for audio outputs corresponding to the said first and said second print elements element (ROM or RAM, 5:64-6:6) [Claims 40, 52, & 64], and a processor coupled to the optical detector [Claims 40 & 64] (microprocessor, 4:46-5:5) [Claims 40, 52, & 64].

11. Blume teaches wherein the output device is an audio output device operable to output an audio instructional response associated with plurality of substantially invisible codes [Claims 41, 43, 53, 55, 65, & 67], wherein a task is audibly presented to the user by the audio output device [Claims 42, 54, & 66], and wherein the first instructional response relates to a task presented to the user [Claims 47, 59, & 71]. ("turn the page when you hear the BEEP, 1:29-35; see also tests, 7:32-54) [Claims 41-43, 47, 53-55, 59, 65-67, & 71].

12. Blume teaches wherein the computing device is a writing device (a stylus, 3:7-17) and wherein the processor, the input device, the output device, and the writing device form a

housing having a pen-like appearance (3:7-17 & 4:46-5:5; the housing disclosed by Blume in Figures 1 & 2 is understood to be a single unit) [Claims 48, 60, & 72].

13. Claims 38, 39, 46, 50, 51, 56, 58, 62, 68, & 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blume and Nir, and further in view of Kardach (US 2003/0001020 A1), hereinafter referred to as Kardach.

14. Blume and Nir teach all the features of Claims 41, 53, 65, & 73-75, as demonstrated above. What Blume and Nir fail to teach is wherein the unstructured user input comprises a first print element is a non-keyboard [Claims 46, 58, & 70] user created [Claims 38, 50 & 62] element, created by the user on said surface [Claim 38], where the device has a writing element [Claims 39, 51, & 63], wherein said surface is a writing surface [Claims 44, 56, & 68]. However, Kardach teaches a method and apparatus for taking an electronic application program's output and printing them on a piece of paper having a preprinted pattern thereon, thereby creating a hardcopy representation. The hardcopy representation of the application includes a unique ID, which associates the application printed on the page with the preprinted pattern on the paper. Using a special pen, edits may be made to the hardcopy representation. The pen records these edits and sends the updates to a computer system automatically. In response to the receiving the edits, the computer system updates the electronic application automatically (Abstract). A pen may be used to make edits to the hardcopy representation. The pen includes an inkwell for dispensing ink from the pen, a camera to create images of the unique pattern on the hardcopy representation as well as the ID, and a processor coupled to the camera to control the operation of the camera. When the pen draws a line across the ID icon, it reads the ID pattern and then the paper pattern, which are both part of this larger pattern. The ID icon pattern location will be associated with the printed application, while the paper pattern will be associated with a blank

page function. When the pen recognizes a pen stroke between these two pattern areas, the local composer will then associate that paper pattern with the meaning assigned it via the ID pattern. During the creation of the paper application {i.e., when it was printed}, the computer will have stored paper pattern information associated with the functions to be performed {e.g., writing in this pattern area means to create an appointment} (Para. 0033-34, see also Figure 5, Item 501). The stylus taught by Blume would contain an ink writing element disposed therein, to be used in the manner taught by Kardash for editing a document electronically with a visible, written pen stroke. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have implemented the ink writing element disposed in the pen taught by Kardash, for a user to create an unstructured user input print element on the writing surface taught by Blume, in light of the teachings of Nir, in order to associate a printed piece of paper with an application in an ad-hoc fashion [Claims 38, 39, 46, 50, 51, 56, 58, 62, 68, & 70].

Response to Arguments

15. Applicant's arguments with respect to claims 40-44, 47-49, 52-55, 57, 59, 60, 63-67, 69, & 71-75 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. O'Donnell, Jr. (US 2002/0126105 A1) discloses a digital writing instrument in which an audio output can confirm the identification of a written prescription and provide instructions for dispensing and taking the prescription.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIKOLAI A. GISHNOCK whose telephone number is (571)272-1420. The examiner can normally be reached on M-F 11:00a-7:30p EST (8:00a-4:30p PST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/20/2010
/N. A. G./
Examiner, Art Unit 3715

/XUAN M. THAI/
Supervisory Patent Examiner, Art Unit 3715